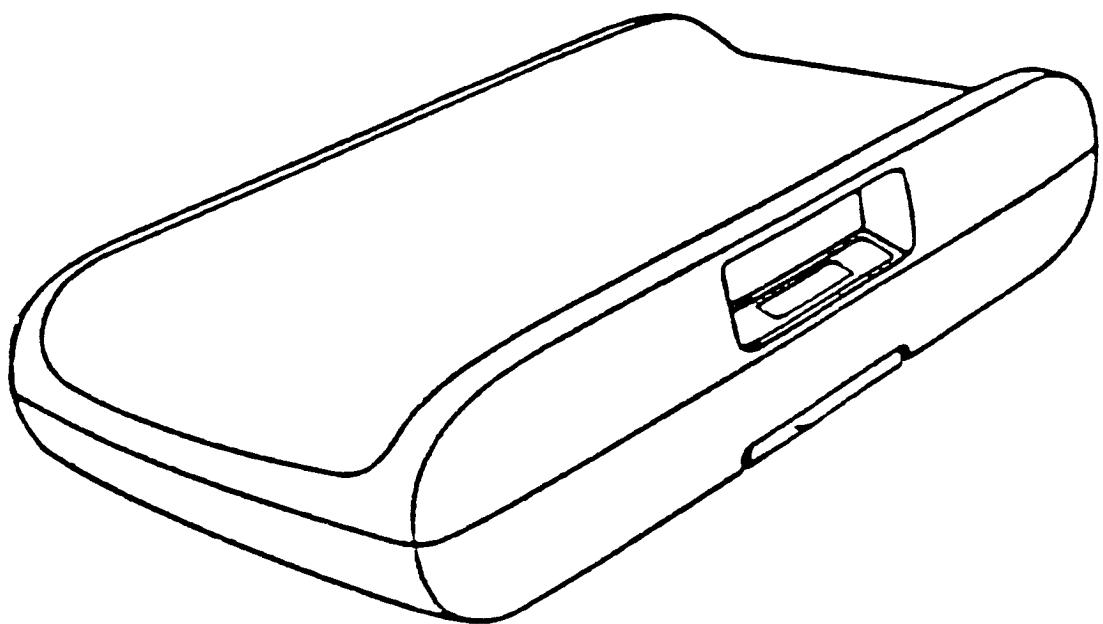


seca

Mod. 727



Service-Unterlagen

Service Manual

17-05-01-224
04/85 E IV

seca Meß- und Wiegetechnik Vogel & Halke GmbH & Co. P.O.B. 761180 2000 Hamburg 76 BRD Tel. 040/20 00 00-0 Fax 040/20 00 00 50
seca fd Weighing and Measuring Systems seca House 40 Barn Street Ciggein Birmingham B5 6QB England Telephone 021 643 9349
seca sari Appareils de Pesage et de Mesure BP 29 ZI Rue Lavoisier 91430 Guy France Telephone 01 60 19 37 54 Telex 60 3 08 420 seca
seca ag Meß- und Wiegetechnik Appareils de Pesage et de Mesure Postfach Schonmattstrasse 4 CH 4153 Reinach BL Tel. 061 76 00 00
seca corporation Weighing and Measuring Systems 8920 A Route 108 Oakland Center Columbia Maryland 21045 USA Tel. 301 964-38 58

DESCRIPTION OF WIRING CIRCUIT - ELECTRONIC SYSTEM

Model 727 Digital baby scale

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with: Electric circuit diagram.
 Assembly diagram.

1. The weighing unit

For load measuring a spring body made of copper-beryllium will be used. It carries 4 elastic strips (DMS) coupled to an electric bridge. The load on the weighing tray compresses or releases the spring and so the resistance of the bridges. The increase or reduction of the bridge resistance changes the output signal:

$$U_a = k \times U_s \times F \quad U_A \quad F$$

2. The pre-amplifier

The small output signal of the DMS weighing strips will be amplified strongly with the operation amplifier 8 which has nearly no drift. At the same time the NTC resistance combination 6,7 compensates the temperature influence for the weighing unit. Resistance 1,2 are for rough setting of the zero point.

3. The analog-digital transformer

The A/D transformer processes the output signal of the preamplifier. It operates with frequency modulation. All digital functions of the A/D transformer are performed with software in the μ C. The reference potential of the A/D transformer will be set with resistances 12, 13, 26, 27 to $U/2$. During the pre-set total period T , the input voltage $+U_m$ goes over the resistance 11 and the reference voltage 0 V over the FET switch 19a, the resistances 14, 15, 16, 17, 18 to the input of the integrator. The elements are so designed that during this phase the integrator will integrate all input voltage up until the comparator 24a reacts. The reaction line of the comparator is given by the resistances 26 and 27. The resistance 25 produces a positive coupling and prevents oscillations of the comparator.

The reaction of the comparator 24a will be noted by the μ C and then the FET switch will be switched off (19a). Now the integrator goes down during the whole T period. The time interval between $T = 0$ and the reaction of the comparator equals the input voltage U_m .

E 30-34-00-362/8

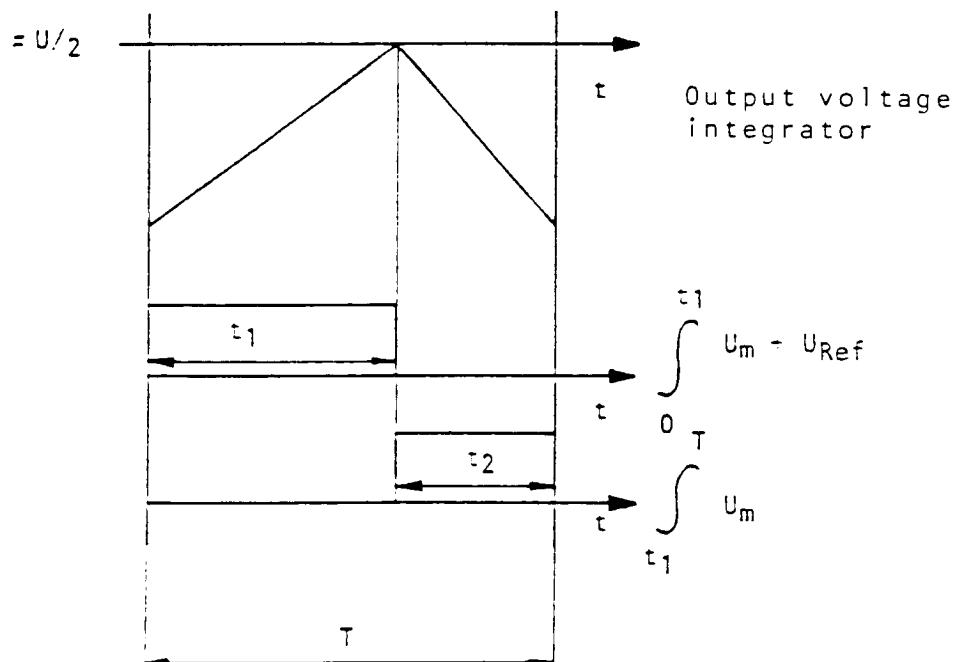
DESCRIPTION OF WIRING CIRCUIT - ELECTRONIC SYSTEM

Model 727 Digital baby scale

Page - 2 -

The trimmer 15 is for Gal setting. 16 for fine indication adjustment. Since we hold the setting range of 16 very small, the indication may be set with a combination 17, 18.

Time diagram A/D transformer



4. Microcomputer and Indication

The central calculation and control element is the one-chip μ C 30 for the following functions:

- o A/D transformation (digital)
- o Zero point determination.
- o Voltage supply control (digital).
- o Automatic zero point setting.

All functions are with software in the ROM.

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DESCRIPTION OF WIRING CIRCUIT - ELECTRONIC SYSTEM

Model 727 Digital baby scale

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Operation flow

After the start operation will be as follows:

Return

With elements 42, 43, 70 the μ C will be returned to initial position.

Self-test

All ROM codes will be totalized and compared with a check number.

All RAM cells are written and read with OH and FFH.

In case of faulty operation the segmentport (pin 8-15) will issue the information 10101010 B and further activity will be stopped.

Cold start sequence

For ensuring a safe start up (i.e. thermic) of the analog electronics the cold start sequence is provided. As long as pin 34 will be on 1-potential the A/D transformer will operate, but its results will not be used. During the cold start period seca will be displayed. The cold start period is set with the time constants of 66 (R) and 67 (C). The gate 60b serves as comparator.

Zero point memory

The first A/D cycle after the cold start period serves for memorizing the zero point. Its Mo value goes to the memory and will then be deducted from all following values Mn.

Weight determination

The weight will be the result from the real measuring value (M1) less the zero point value (Mo) divided by 6:

$$F = (M1 - Mo) / 6.$$

The internal resolution is 6x.

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DESCRIPTION OF WIRING CIRCUIT - ELECTRONIC SYSTEM

Model 727 Digital baby scale

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If $F = 1/4$ d the zero point indicator will be addressed and 00,00 displayed.

Since all functions are binary the result F must first go into the BCD code and then be transformed into the 7-segment-display.

Display

The real weight F will be displayed with a 5 digit 7-segment-LED-Indication (1-5) addressed by multiplex.

The microcomputer will issue the prepared 7-segment-information on port P4. Over the 8x-Darlington driver 32 and the 8x-resistance-network 33 the cathodes of the LEDs are addressed. The joint anodes are addressed over the corresponding digital transistor (38-41) to $U = +5$ V.

The segment information issued from the output port P4 are read back over the input port P0 and compared. If they are not identical, "F" will be issued for the digit.

Overload signal

The real measuring value M1 will be checked against 2 limit values:

a) Weighing range exceeded

at $F = F_{max} + 5$ d STOP will be displayed.

b) Limit value exceeded

at $F = F_{lim}$ STOP will be displayed.

Voltage supply control (digital)

A voltage supply control may be connected to input 28. If this pin is on 0-potential the processor will stop the normal weighing cycle and display BATT.

E 30-34-00-362/8

DESCRIPTION OF WIRING CIRCUIT - ELECTRONIC SYSTEM

Model 727 Digital baby scale

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5. Power supply

For the circuit two voltages will be available. Extra advantage points of this circuit are:

- a) No power draw when the unit is inoperative.
- b) Safe function also with small longitudinal voltage.
- c) Reference element with small T_k (= less than 25 ppm/ $^{\circ}\text{C}$).
- d) Operation period adjustable.
- e) Low voltage control.
- f) Discoupling of U analog and U digital.
- g) Automatic change-over continuous/discontinuous operation.
- h) Battery load with constant current.

Voltage stabilization

Power supply will be done either with the battery (discontinuous operation) or with the mains transformer (continuous operation). The unit will be made operative with the main switch. By pushing the start button the transistor 77 will be activated over 81, 82, and 96. The diode 79 prevents $+U_s$ voltage by switching off the power supply 81 in due time. The amplifier 21b compares voltage U_s with voltage in the reference element 76 over the voltage cutter 73.

Its output signal addresses 19d and 78 and the longitudinal transistor 77 until the output voltage will have the required 5,7 V. The digital portion will be supplied over the buffer transistor 135 for discoupling.

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DESCRIPTION OF WIRING CIRCUIT - ELECTRONIC SYSTEM

Model 727 Digital baby scale

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Discontinuous operation

If no voltage U_e will be available the power supply will be made from the battery and the scale will switch automatically to discontinuous operation. When pushing the start button the condenser 108 will release its full load over 107 and 109 so that the outputs of gates 100b, c, d will go to 0 V (these are supplied from the battery) for activating the transistor 103. After about 55 sec. the condenser 108 will have back its switch load of 100a over 105 and the output of 100b, c, d will address +UB and the transistor 103 will cut so that the scale will be switched off.

Continuous operation

When supplying a $+U_e$ voltage from the mains the scale will switch over automatically from discontinuous to continuous operation. The loading current for the battery will come from the self-oscillating transformer 120-123. When the transistor 126 is activated, the unit 120 will be loaded with constant energy which goes over diode 118 into the battery whilst transistor 126 will be closed. Over 113 and 110 gates 100 are so addressed that the transistor 103 will close for protecting the battery.

Low voltage control

Safe control will be possible only with a given minimal input voltage. The comparator 24b compares over resistances 93, 94, 95 the input voltage with the reference voltage. If input voltage will be under the admissible value, the comparator 24b will address a signal to the μ C and then BATT will be displayed.

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MANUAL CALIBRATION

Model 727 Digital baby scale

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- Set the calibrated transformer to +8 V out voltage.
- Set the breaking current of the transformer to $I_{max} = 1 \text{ A}$.
- Switch off the transformer.
- Connect the transformer to $M78 = \perp$ and $M77 = U_e = +$.
- Brace-circuit M63 and M64 (main switch).
- Connnect the voltmeter (10 V =) to $M78 = \perp$ and $M48 = +$.
- Switch on transformer, start module (connect M61 with M78 for a short period) and watch the ammeter. Current draw should be $< 300 \text{ mA}$.
- Voltage at M48 should be $U_{48} = V_{cc} = 4,7 \text{ V} \dots 5,5 \text{ V}$.
- Should voltage U_{48} exceed 5,5 V switch off the transformer immediately and trace the error. If excessive voltage should be hold too long, the microcomputer may be damaged.
- Check voltage at M51 and make a note of it.
 $U_{51} = U_{\text{analog}} = 5,5 \text{ V} \dots 6,5 \text{ V}$.
- Scale must remain operative.
- Put in program bridge G (B2) (pin 27 to μC , zero point indication).
- Put in program bridge D (B6) (pin 37 to μC , 20,0 kg model).
- Put all trimmer to central position.
- Take any weight from the tray $F_0 = < 100 \text{ g}$.
Check voltage $U_5 \text{ M5} - M78 (\perp)$
 $= U_5 \geq U_{51}/2 + 0,3 \text{ V}$ decade A for 1 ($M1 - M51$)
 $= U_5 \leq U_{51}/2 + 0,3 \text{ V}$ decade A for 2 ($M1 - M78$)

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MANUAL CALIBRATION

Model 727 Digital baby scale

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- o Operate decade A until $U_5 = U_{51}/2 + 0,3$ V.
- o Start module.
- o The A/D transformer should now operate (triangle function at M8).
- o Operate decade A until indication = 0,75 kg (\pm 100 g).

Attention! When turning decade A the A/D transformer may switch off. The module can then be started again.

- o Take off program bridge G (B2).
- o Start module (indication = 0.000 kg).
- o Put on decade B for 18 (M7 - M78) and set to 100 kOhm.
- o Put 10 kg load on the tray.

Operate decade B until indication = 16 kg \pm 20 g.

Attention! When doing this the zero point may change.

Take load from the tray, start module (indication = 0.000 kg).

Repeat this until getting the following:

$F = 10$ kg indication = 16 kg \pm 20 g.

- o Put in program bridge G (B2).
- o Adjust zero point with decade A until indication will be 0,75 kg \pm 100 g.
- o Solder values of decades A+B with metal layer resistances ($TK \leq 50$ ppm) of series E96 (next value).
- o Check zero point:

$F = 0$ kg indication = 0,75 kg \pm 100 g.

- o Take off program bridge G (B2).
- o Start module (indication = 0.000 kg).

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MANUAL CALIBRATION

Model 727 Digital baby scale

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o Indication control:

 $F = 10 \text{ kg}$ indication = $16,00 \text{ kg} \pm 20 \text{ g}$.o Reduce input voltage slowly $U_{77} = U_e$ (M77).o Check voltage $U_{51} = U_s$ (M51).Voltage should vary (U_{51}) max. $\pm 10 \text{ mV}$ until Batt will show up in the indication field.Batt should show up first at U_{77} (M77) $\leq 7 \text{ V}$ (typical for $\leq 6,5 \text{ V}$).

o Take load from the tray and start module.

o Check serial interface. Square pulsation sequence at M80 and M81.

o Control oscillator at M71. Frequency $f = 100 \text{ kHz}$ ($\pm 20 \text{ kHz}$).o Connect accu-package (8 cells à $1,2 \text{ V}$, 500 mAH) with minus to earth \perp (M78).o Connect plus over ammeter (100 mA) to M68.o Vary input voltage U_e and watch batt-current. Batt-current may change max. as follows: $U_e = 8 \text{ V} \dots 12 \text{ V} \quad I_L = 15-35 \text{ mA}$.o Set input voltage U_e to 8 V and switch off the mains transformer.

o Connect positive pole of the transformer to M63, wait for 15 sec. and switch on the transformer.

o Start module and watch the time. Indication period should be 55 sec. ($\pm 10 \text{ sec.}$).

E 30-34-00-363/85

MANUAL CALIBRATION

Model 727 Digital baby scale

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Temperature check + seasoning

-
- Bring modules in a warm clima chamber (40° C), switch on and operate min. 12 h in a 120-sec.-cycle.
- Put in program bridge G (B2) (indication of zero point).
- Take a note of the following value at 40° C:
 $F = 0 \text{ kg} \quad FOT40 = \dots \text{ kg}$
- Take off program bridge G (B2) and start module (indication = 0.000 kg).
- Take a note of the following value at 40° C:
 $F = 10 \text{ kg} \quad F10T40 = \dots \text{ kg}$
- Cool down module to 15° C and wait for min. 2 h.
- Put in program bridge G (B2) (indication of zero point).
- Take a note of the following value at 15° C:
 $F = 0 \text{ kg} \quad FOT15 = \dots \text{ kg}$
- Take off program bridge G (B2) and start module (indication = 0.000 kg).
- Take a note of the following value at 15° C:
 $F = 10 \text{ kg} \quad F10T15 = \dots \text{ kg}$
- The following tolerances of the compensated module will be admissible:
 - zero point drift: $FOT40 - FOT15 = \pm 500 \text{ g}$
 - indication drift: $F10T40 - F10T15 = \pm 90 \text{ g}$
- Should indication drift be more than 90 g, solder resistance R6 to basic-program RP727No.01.KLI and repeat the temperature check.
- Take off program bridge G (B2).
- Take off program bridge D (B6).

E 30-34-00-363/8

MANUAL CALIBRATION

Model 727 Digital baby scale

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Installation and final check

- o Assemble the scales completely.
- o Install the accu-package, connect the scale to the mains transformer, switch on and start operation.
- o Load the unit with 14 kg and adjust the indication with 16.

Attention! When doing this the zero point will change.

Take off the load and set to zero
(Indication = 0.000 kg).

Repeat this until the following value will show up:

$F = 14 \text{ kg}$ Indication = $14,00 \text{ kg} \pm 20 \text{ g}$.

- o Load the unit with 15 kg and set to zero. Increase load slowly and watch whether STOP will show up in the indication field over 6-7 kg. If this should not be so the internal zero point is not set correctly.
- o Take load from the unit, unwire the mains transformer and start the unit (accu-operation). Indication should switch off after about 55 sec.
- o Switch off the unit.

E 30-34-00-363/8

SERVICE INSTRUCTIONS

Model 727 Digital baby scale

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to: Components draw.
Electric flow dia.

1. Checking power supply

- - o Connect the unit with the transformer to the mains and start it.
 - o Voltage check
 - between M78 and M51 5,45 to 5,95 V
 - between M78 and M48 4,75 to 5,25 V

Should this voltage not be available, change main platine as per instructions 30-34-00-321.

2. Zero point check

- - o Put in bridge B2.
 - o Take load off unit and start

The indication shows about 4 kg or the value given on the sticker. If the value should be for \pm 1 kg, change the main platine as per instructions 30-34-00-321.

3. Weight increase check

- - o Start the unit.
 - o Check indication with weights (about 14 kg) and adjust with trimmer 16 if necessary. If setting range will not be sufficient, remove resistance 18 and get new value with resistance decade.

Attention: Zero point will also change with the setting!

When setting is done check zero point (2.).

If setting will not be possible, change main platine to Instructions 30-34-00-321.

E 30-34-00-320/8

SERVICE INSTRUCTIONS

Model 727 Digital baby scale

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4. Mechanical check

- o Optical check.
- o Check over-load stop.
- o Make sure that the lever system operates smoothly without hooking.

If any part should be defective sent back the unit for repair.

5. Trouble shooting

An optical check should always be made for correct soldering, corrosion, dirt and assembly.

- o Unit cannot be started:

- See point 1.
- See point 2.

Possible troubles: a) Power supply.
b) Load tray.
c) A/D transformer.
d) Quartz.
e) µC.

- o After the start a weight will be indicated:

- See point 2.

Possible trouble: a) Load tray.

- o Indication dose not react to small load:

- See point 2.
- See point 4.

Possible troubles: a) Load tray.
b) Mechanical system.

E 30-34-00-320/85

SERVICE INSTRUCTIONS

Model 727 Digital baby scale

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o Indication flickers under load:

- See point 2.
- See point 3.

Possible troubles: a) Load tray.
b) A/D transformer.

o Wrong load indication:

- See point 3.

Possible trouble: a) A/D transformer

E 30-34-00-320/8

REPLACEMENT INSTRUCTIONS

Model 727 Digital baby scale

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1. Open scale

- Turn the unit bottom up (fig. 1). Take out the low voltage plug.
- Undo the 4 screws "A" and the 2 cross head screws "B".
- Turn the scale over again and remove the top half of the baby tray (fig. 2). All exchangeable parts are now accessible from the top (fig. 3).

2. Changing the electronic system with transducer

- Remove the socket connector "C" from the circuit board. Remove the individual wires -11, +10 and -7, +8, 1, 2, 12, and 13 from the circuit board.
- Undo the transistor "D" from the base plate. One hex-bolt (spanner S 5,5). Attention: Do not lose the counter nut.
- Undo the cross beam "L" with the transducer - 2 crosshead screws. Unhook the transducer from the S-hook. Attention: Do not lose the counter nut.
- Undo 4 crosshead screws "E" which hold the circuit board. Attention: Do not lose the counter nut.
- Remove the circuit board with transducer and transistor towards the back.
- Place the new circuit board with transudcer into the scale. Hook transducer onto the S-hook.

Reassembling of the components should now be done in reverse order to the above. Care should be taken to the following points:

- Do not break the soldered connections between the transducer and the circuit board.
- Screw earth cable "M" under the circuit board.
- It is important to put the insulating washer between transistor and base plate (fig. 4).

E 30-34-00-321/8

REPLACEMENT INSTRUCTIONS

Model 727 Digital baby scale

Page - 2 -

- Connecting wires should not touch the lever mechanism.
- Check the mechanical overload stop - adjustment with screw "N".
- Readjust the scale - indication setting with setting poti "O".

3. Changing the display unit with the zero setting switch

- o Remove the socket connector "C" from the circuit board.
- o Undo the crosshead screws with cable clamp "G".
Attention: Do not lose the counter nut.
- o Undo the 2 screws "H" for indicator circuit board and switch, take out the red screen.
- o Remove the wire under the circuit board (earth) and the holder "K" (base plate).
- o Insert the new indicator board with zero setting switch. Assemble in reverse order. Watch the following:
 - Pull the wires through first.
 - Slide the indicator circuit board on its brackets as far as it will go.
 - Replace the red screen with spacers. Align the switch to the button and check its function.

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REPLACEMENT INSTRUCTIONS

Model 727 Digital baby scale

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4. Changing plug connection, main switch, battery connection, change-over kg/lbs

These components are exchangeable complete with their wiring. Disconnection is at the main circuit board.

Ref.-Nos. of connecting points:

- o Plug Connection Ref. -11 and +10
- o Main switch Ref. 1 and 2
- o Battery connection Ref. -7 and +8
- o Change-over kg/lbs Ref. 12 and 13

5. Reclosing the scale

- o Put the top part of the baby tray back on and, holding it together with the lower part, turn the unit over so that the base plate is uppermost.
- o Put in the 2 crosshead screws "B" and the 4 screws "A" and tighten.

E 30-34-00-321/85

REPLACEMENT INSTRUCTIONS

Model 727 Digital baby scale

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DIAGRAM 1

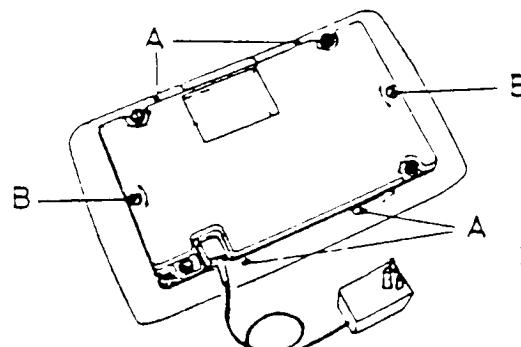


DIAGRAM 2

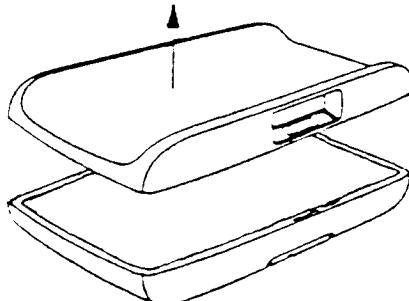


DIAGRAM 4

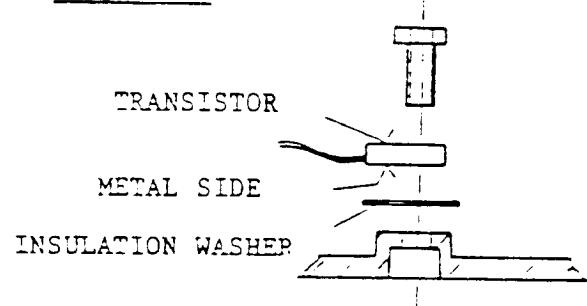
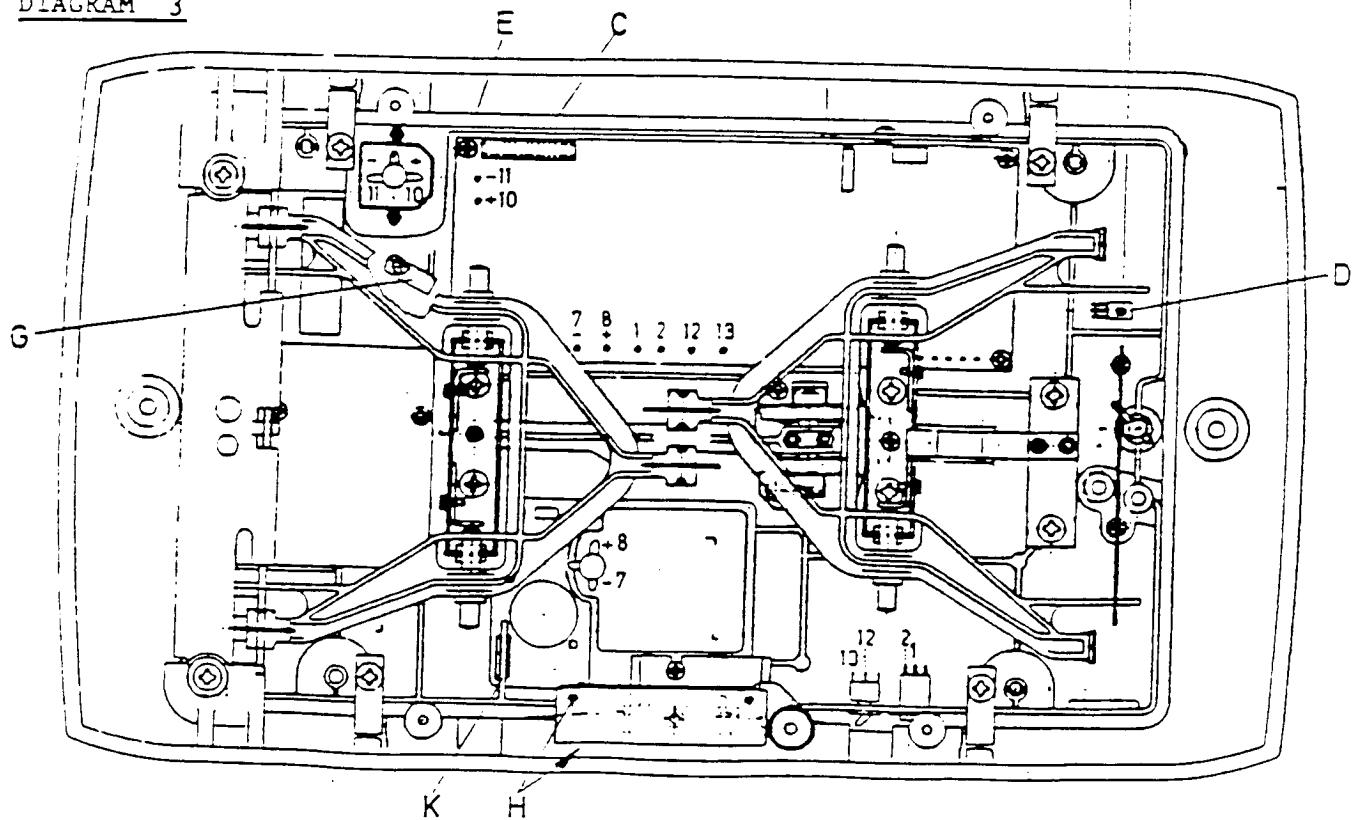


DIAGRAM 3



E 30-34-00-321/8

Ersatzteilliste

Modell 727/747 Digitale Säuglingswaage

Blatt 1

Mod. 727/747

08-06-14-018

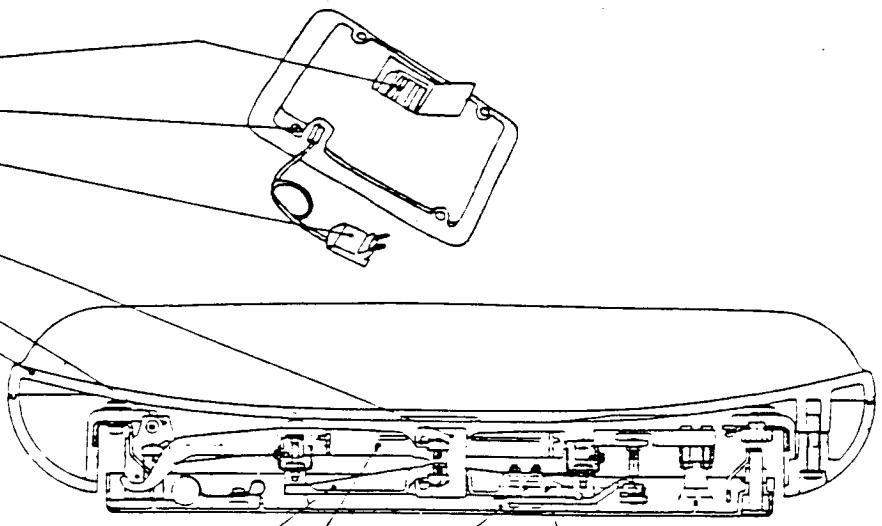
01-10-04-209

08-06-14-015

01-01-03-016

01-01-03-066

02-03-01-230



Mod. 747

02-07-01-031

08-06-04-078+

08-06-12-019+

08-06-04-100

Mod. 727/747

02-05-01-044

01-04-05-213

01-04-07-207

01-03-01-024

02-03-01-229

01-03-01-021

01-03-01-022

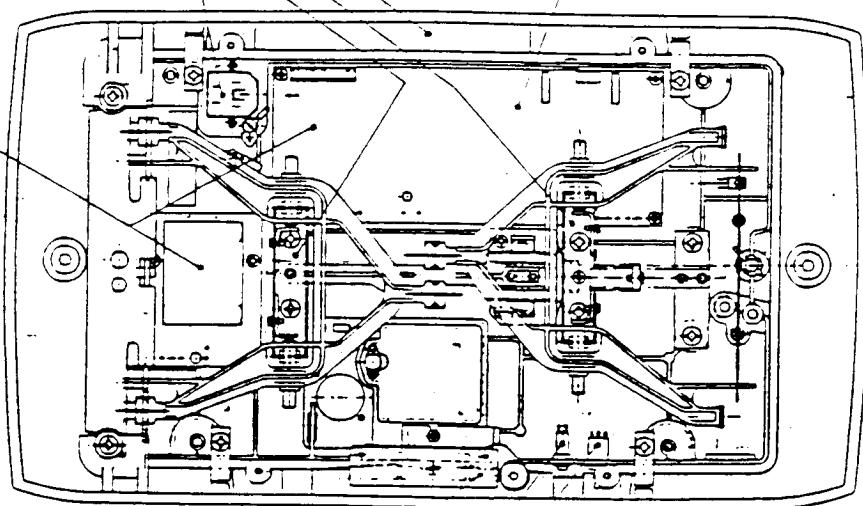
08-06-11-098

Mod. 727

02-07-01-032

08-06-04-122+

08-06-12-019



Mod. 727

02-03-01-232

01-22-13-232

08-06-11-063

08-06-11-109

08-06-11-066

Mod. 747

02-03-01-232

01-22-13-231

08-06-11-057

08-06-11-061

08-06-11-059

30-34-00-357

Spare parts list

Model 727 Digital Babyscale

Page - 1 -

<u>Reference-No.</u>	<u>Description</u>	<u>Price</u>
08-06-04-122	Electronics with	99
08-06-12-006	Transducer complete (on part exchange basis)	
02-03-01-229	Lower part of babytray	36
02-03-01-230	Upper part of babytray	39
01-22-13-232	Digital display screen	27
01-01-01-066	Lever suspension bracket	13
01-01-03-016	Centre coupling	16
02-05-01-044	Lever	34
02-07-01-032	Transmission lever	31
01-04-05-213	Pivot knife edge	18
01-04-07-207	Lower lever	08
01-05-05-208	Mounting socket	08
01-03-04-236	Shock absorber	08
01-03-01-021	Lever pedestal	23
01-03-01-022	Lever pedestal with overload protection	24
01-05-05-207	Shock absorber	08
01-03-01-024	Pedestal	18
02-03-01-232	Zero push button	23
01-10-04-209	Foot	17
08-06-14-018	Battery holder with connection cable	24
08-06-14-015	Power pack (check market specification)	36
08-06-12-033	Power insertion	08
08-06-11-063	Display with zero push button and cable	40
08-06-11-098	Plug connection (check market specification)	10
08-06-11-066	Main switch (on/off)	18
08-06-11-109	kg/lbs selector switch	18

30-34-00-384

Wort-Uebersetzung

=====

deutsch -> englisch

* Stand: 04/85 *

Analogschalter	analog switches
Anzeige	display
AND-Gatter	AND gate
Antiwaermescheibe	heat abdукtion insulating disc
Anschlussplatine	connection board
Anzeigeplatine	display board
Analogsignalverarbeitung	analog signal processing
Abschirmung	shielding
Anschluss-Kasten	adapter kit,connection box
Aufloesung	graduation
Akku-Ladeschutzzschaltung	accumulator charge and protect circuit
Anschlusskabel	power cord
Buchse	socket
Buchsenleiste	multipoint connector
Blechschraube	sheet screw
Blockschaltbild	block diagram
Bestueckungsplan	component diagram
Bohrplan	drill diagram
Batteriefach	battery compartment
C-Mos-RAM	CMOS-RAM
CPU	CPU
Diode	diode
D Flip-Flop	D flip-flop
Dekoder	decoder
Drossel	inductor
DIL-Schalter	DIL-switch
Draht	wire
Drahtbruecke	jumper
Digitalsignalverarbeitung	digital signal processing
Dehnung	tension
DIL-Widerstandsnetzwerk	DIL resistor network
Elektolyt-Kondensator	electrolytic capacitor
E-Prom	EPROM
Epoxydglasfaserplatte	epoxy glass plate
Empfindlichkeit	sensitivity
Empfindlichkeits-Kompensation	sensitivity compensation
Fassung	socket
Federscheibe	spring washer
Funktionsfehlererkennung	error recognition and identification
Frontplatte	front panel
HF-Drossel	HF-inductor
Hauptplatine	main board
Hauptschalter	main switch
IC	IC
Inverter	inverter
I/O-Baustein	peripheral interface
Isolierband	insulating tape
Kohleschichtwiderstand	carbon-film resistor
Kondensator	capacitor
Keramik-Kondensator	ceramic capacitor
Komparator	voltage comparator
Kuehblech	cooling plate
Kuehlkoerper	dissipator
Kabel	cable
Kaltstartphase	warm-up time
Leitungsempfaenger	line receiver
Leitungstreiber	line driver
LED	LED
Loetstift	soldering pin

Loetfahne	soldering lug
Leiterplatte	printed wiring board
Loetseite	soldering side
Leuchtdiode	light emitting diode
Metallschichtwiderstand	metal-film resistor
MCNO	monostable multivibrator
Metallfilmwiderstand	metal film resistor
NOR-Gatter	NOR gate
NAND-Gatter	NAND gate
Netzschalter	power switch
Netzteil	power supply
Netzanschluss	power adapter
Nullpunkt	zero point
Nullpunkt-Kompensation	zero point compensation
Nullpunktanlauf	zero follow-up
Operationsverstaerker	operational amplifier
Optokoppler	photo coupler
OR-Gatter	OR gate
Platine	board
Plattenabmessung	board measurement
Programmwahlbruecke	program selection bridge
Quarz	crystal
Referenzelement	reference diode
Schottky-Diode	Schottky diode
STI	STI
Summer	buzzer
Schalter	switch
SIL-Schalter	SIL-switch
Stecker	connector
Silber-Draht	silver wire
Stiftleiste	pin connector
Sockel xx-polig	socket for xx pins
Sechskantmutter	hexagonal nut
Stromlaufplan	circuit diagram
Signal	signal
Speisung	supply
Stauchung	compression
Steckstift	pin
Steckernetzgeraet	mains transformer
Trimmer	trimming potentiometer
Tantal-Kondensator	tantalum capacitor
Thyristor	thyristor
Transistor	transistor
Transformer	transformer
Taster	push button switch
Temperatur	temperatur
Temperatur-Fuehler	temperatur sensor
Uebertrager	symmetrical transformer
VDR-Widerstand	VD resistor
Verdrahtungsplan	wiring diagram
Widerstand	resistor
Waagezelle	load cell
X-Segment-Anzeige	X-digit LED
Zener-Diode	Zener diode
Zylinderschraube mit Schlitz	cylinder head screw with slit
Zusatzanzeige	additional display

OPERATING INSTRUCTIONS

Model 727 - Baby Scale

Page - 1 -

Preparation is important

A - Power Supply

=====

The scale can be operated either on mains supply or alternatively by using rechargeable batteries. A charger and rechargeable battery set is included. The use of these accessories in accordance with the following instructions, permits operation while connected to mains power or as a portable scale using rechargeable batteries only.

B - Mains Operation

=====

First turn the scale over so the base is uppermost.

- o Connect the low voltage plug attached to the accompanying mains transformer (11) to the socket (1) on the base.
- o Release the locking catches (2) used to secure the scale in transit. Using a screwdriver turn the outer flat headed screws from the position marked "transp" until the slot points to "weigh".

NOTE: IF THE SCALE IS TO BE TRANSPORTED ANY SIGNIFICANT DISTANCE, THEN IT IS ESSENTIAL THAT THE LOCKING MECHANISM IS USED.

Turn the screws (2) back until the slots point to "transp".

- o Now turn the scale over to the normal operation position.
- o Position the scale using the 4 adjustable feet (3) until it is completely stable.
- o Set the kg/1bs selector switch (9) for whichever weight is required. The switch can be used at any time during a weighing operation.
- o Connect the transformer plug to the mains power supply.

17-10-07-245

OPERATING INSTRUCTIONS

Model 727 - Baby Scale

Page - 2 -

C - Preparation for Battery Operation

=====

The batteries should be charged for 24 hours before using on battery power for the first time. Turn the scale over so the base is uppermost.

- o Undo the screw (10) securing the cover to the battery compartment. Check that the batteries are correctly fitted in the holder (12) and that the plug (13) from the battery holder is fitted to the low voltage connector (14).
- o Release the locking catches (2) used to secure the scale in transit. Using a screwdriver turn the outer flat headed screws from the position marked "transp" until the slot points to "weigh".

NOTE: IF THE SCALE IS TO BE TRANSPORTED ANY SIGNIFICANT DISTANCE, THEN IT IS ESSENTIAL THAT THE LOCKING MECHANISM IS USED.

Turn the screws (2) back until the slots point to "transp".

- o Now turn the scale over to the normal operation position.
- o Position the scale using the 4 adjustable feet (3) until it is completely stable.
- o Set the kg/lbs selector switch (9) for whichever weight is required. The switch can be used at any time during a weighing operation.

The correct way to weigh

A - Weighing

- o Switch the scale on at off/on switch (5). The display will first show " " and then zero. "0:0.0" for lbs and ounces or "0.000" for kg.

Weighing on the 727 scale is fully automatic and a zero balance will be maintained while the scale is switched on. Adjustment is made automatically for small weight changes up to 0.4 oz or 0.020 kg (10 grams).

17-10-07-245

OPERATING INSTRUCTIONS

Model 727 - Baby Scale

Page - 3 -

- Should the display show a weight or a negative signal (----) at any time with nothing on the tray, then the scale should be reset at zero by switching off and on again.
- In battery operation the bar switch must be pressed to obtain a zero display.
- The weight display will switch off automatically after approximately 55 seconds to conserve battery power.

If the word " " appears in the display, this means the batteries need recharging and the scale should be reconnected to the mains power. The batteries will be charging also even the off/on switch is off.

If the scale capacity is exceeded the word " " will appear in the display.

B - Tare

=====

The scale includes a tare feature to permit easy adjustment. This tare adjustment can be used to reset at zero any weight up to a maximum of 14 ounces or 0.400 kg (400 grams).

- Load scale - the weight will be shown.
- Press bar switch (7) - the scale reset to zero and the red lamp marked "TARE/HOLD" will be illuminated continuously when the tare is in use.
- Load scale - read off the weight.

The unloaded scale will automatically return to zero.

C - Hold

=====

The scale includes a hold feature. Weights above 14 ounces and 0.400 kg (400 grams) can be locked into the display.

- Load scale - the weight will be shown.
- Press bar switch (7) - the weight will be shown and the red lamp marked "TARE/HOLD" (16) will flash on and off continuously.

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OPERATING INSTRUCTIONS

Model 727 - Baby Scale

Page - 4 -

- o The weight held will remain even after a baby is removed.
- o Press bar switch (7) - the scale will return to zero.

In battery operation both tare and hold features can be used in the same way as with mains power.

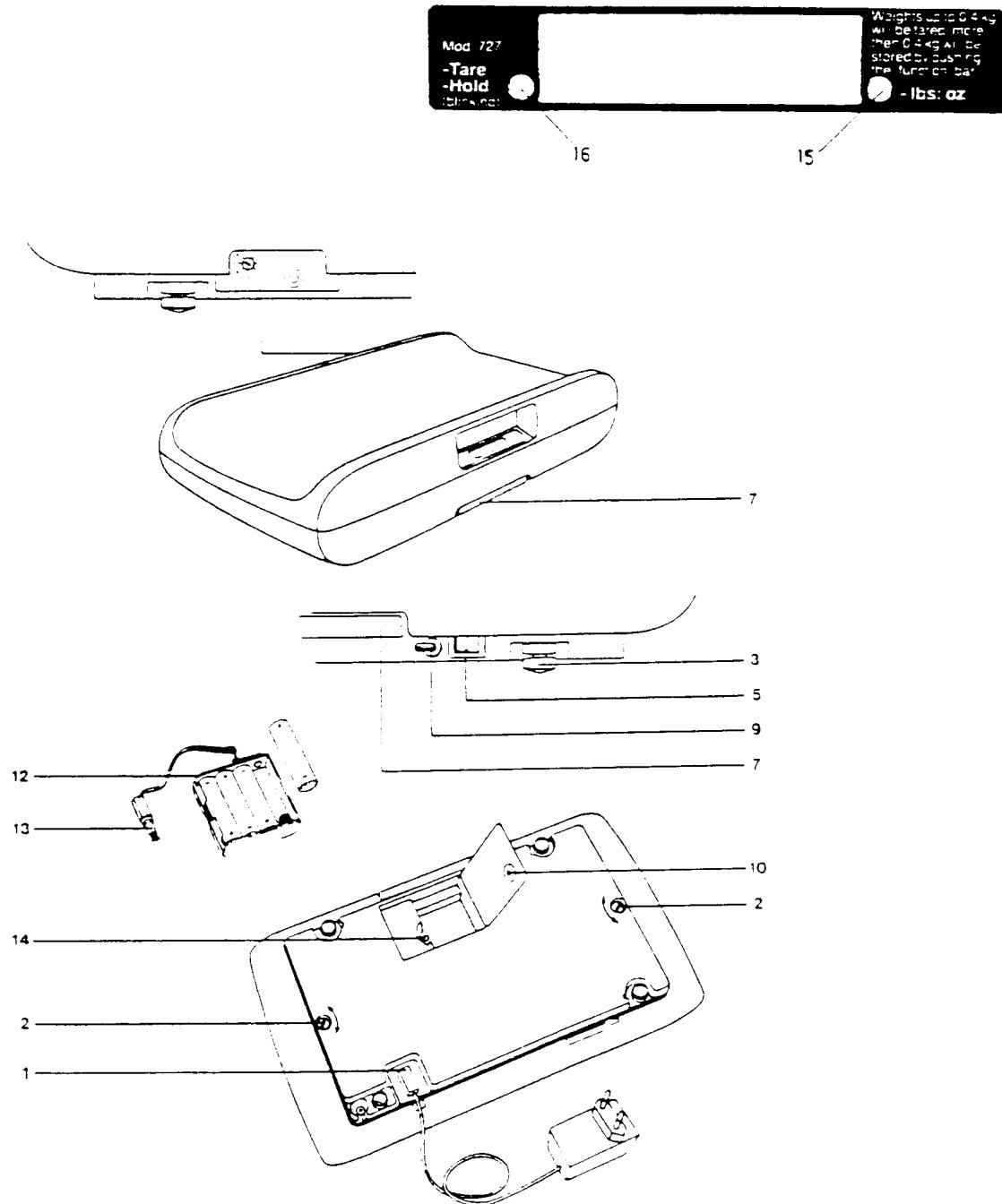
What to do if

- ... no display appears when the scale is switched on?
Check the mains connections at both ends.
Operate the off/on switch again.
- ... weight display remains at zero when scale is loaded?
Check whether the locking catches are set at "weight".
- ... the negative signal "----" appears in the display?
Press bar switch.
- ... the scale is unloaded?
Switch off and on again the reset at zero.
- ... the word " " appears in the display?
The batteries must be recharged.
- ... the word " " appears in the display?
The scale is overloaded.

Technical Data

Weighing range:	0-40 lbs	0-20 kg
Graduations:	0.2 oz	5 g
Tare range:	0-14 oz	0-0.400 kg
Hold range:	14 oz-44 lbs	0.400 kg-20 kg
Height:	5 2/4"	145 mm
Width:	21 5/8"	551 mm
Depth:	12 5/8"	320 mm
Weight:	14.2 lbs	6,5 kg
Power source:	Mains or battery operation	
Tare or zero setting:	By pressing bar switch	
Hold:	By pressing bar switch	

17-10-07-245



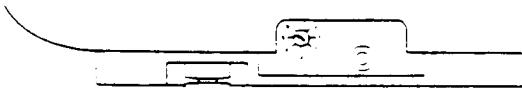
17-10-07-245

Gravity Compensation

Instructions for Gravity Compensation
(gal-value-setting)

The effect of the force of gravity is not the same everywhere in the world, but depends on latitude and also the height above sea level. The seca 727 baby scale functions so accurately that these discrepancies are actually visible through variations on the display. These discrepancies can be easily compensated for, by adjusting the arrow on the setting screw according to the scales 'gal-values' shown in the table 1.

Example: situation = Sydney, (1) latitude = 35°, (2) height above sea level = 100 m, established scale according to the table = 4. For normal working conditions the scales are set at value 2. No adjustment is necessary within the complete zone covered by this value.

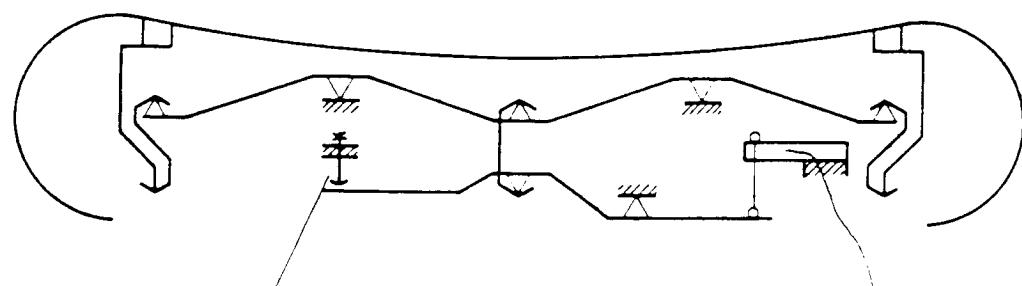
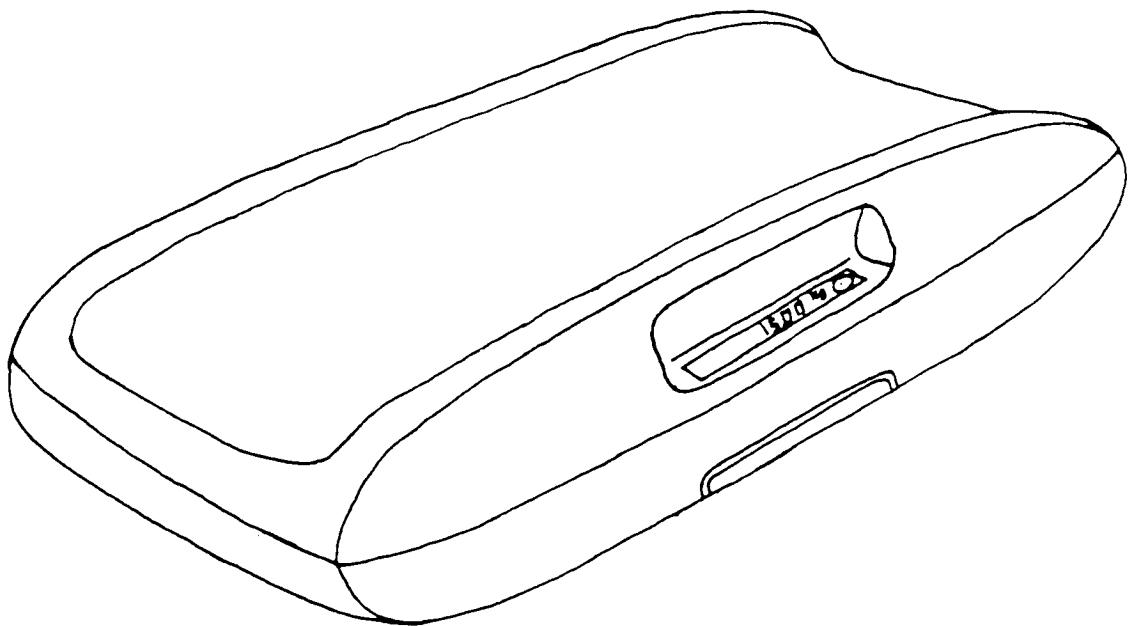



Geograph. Breite bis	Beispiel: Example: Esempio: Esempio:	Höhenlage über dem Meeresspiegel bis
Latitude to		Height above sea level
Latitude geographique jusqu'à		Altitude par rapport au niveau de la mer
Latitud geográfica hasta		Altura sobre el nivel del mar
Latitude geografica fin da		Altitud mare fin da
Latitude geographica	300 600 900 1200 1500 1800 2000 =	
15°	1	6
20°	1	1
25°	1	1
30°	1	5
35°	1	4
40°	1	4
45°	1	3
50°	1	2
55°	1	2
60°	1	1
65°	1	1
70°	1	1
75°	1	1
80°	1	0
85°	1	0
90°	1	0

1 year

guarantee we grant on defects caused by material damage or flaw in manufacture. For electronic-parts a guarantee of 6 months is given. Each scale is examined very carefully before leaving our works but in case there will be justified reasons for claims please get in touch with the seller or the respective seca-agency in your country. Defects which are covered by the a.m. guarantee will be repaired free of charge. Further claims cannot be considered. Transportation costs are at customer's charge. In case the scale is opened by unauthorized persons the a.m. guarantee expires.

Important: This guarantee is only valid in connection with the respective invoice.



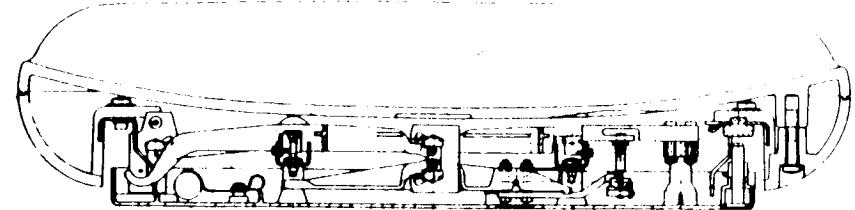
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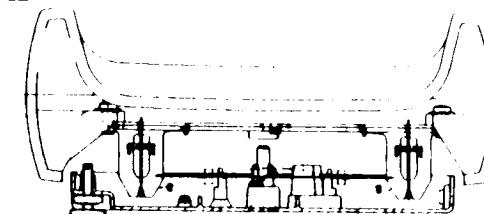
seca

Funktionsschema
Mod. 747

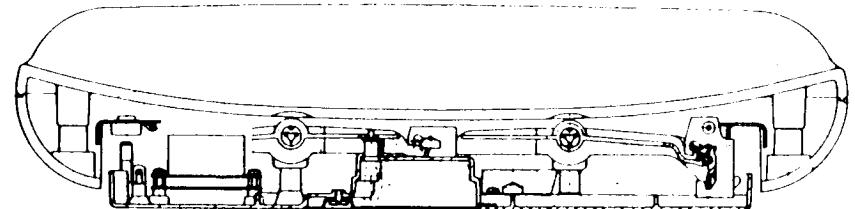
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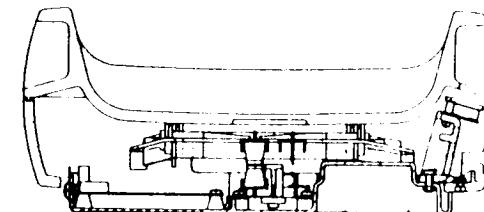
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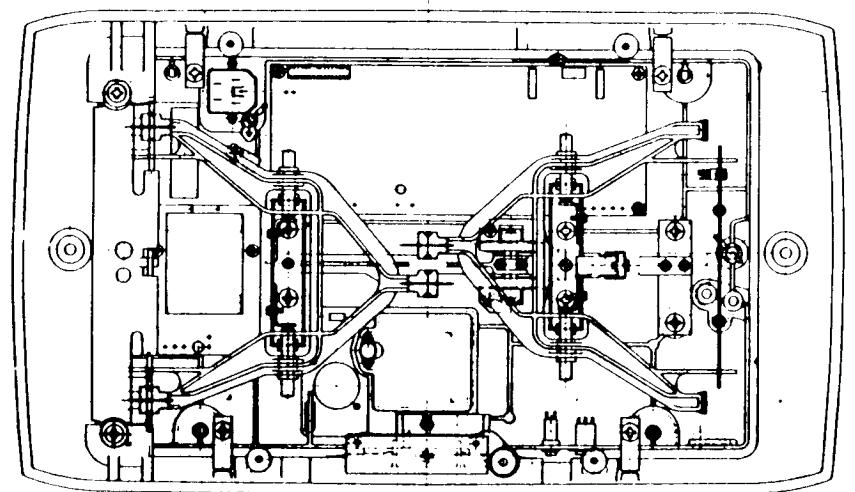
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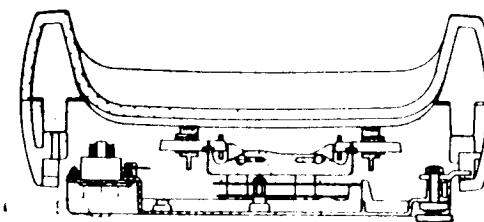
3



Autumn



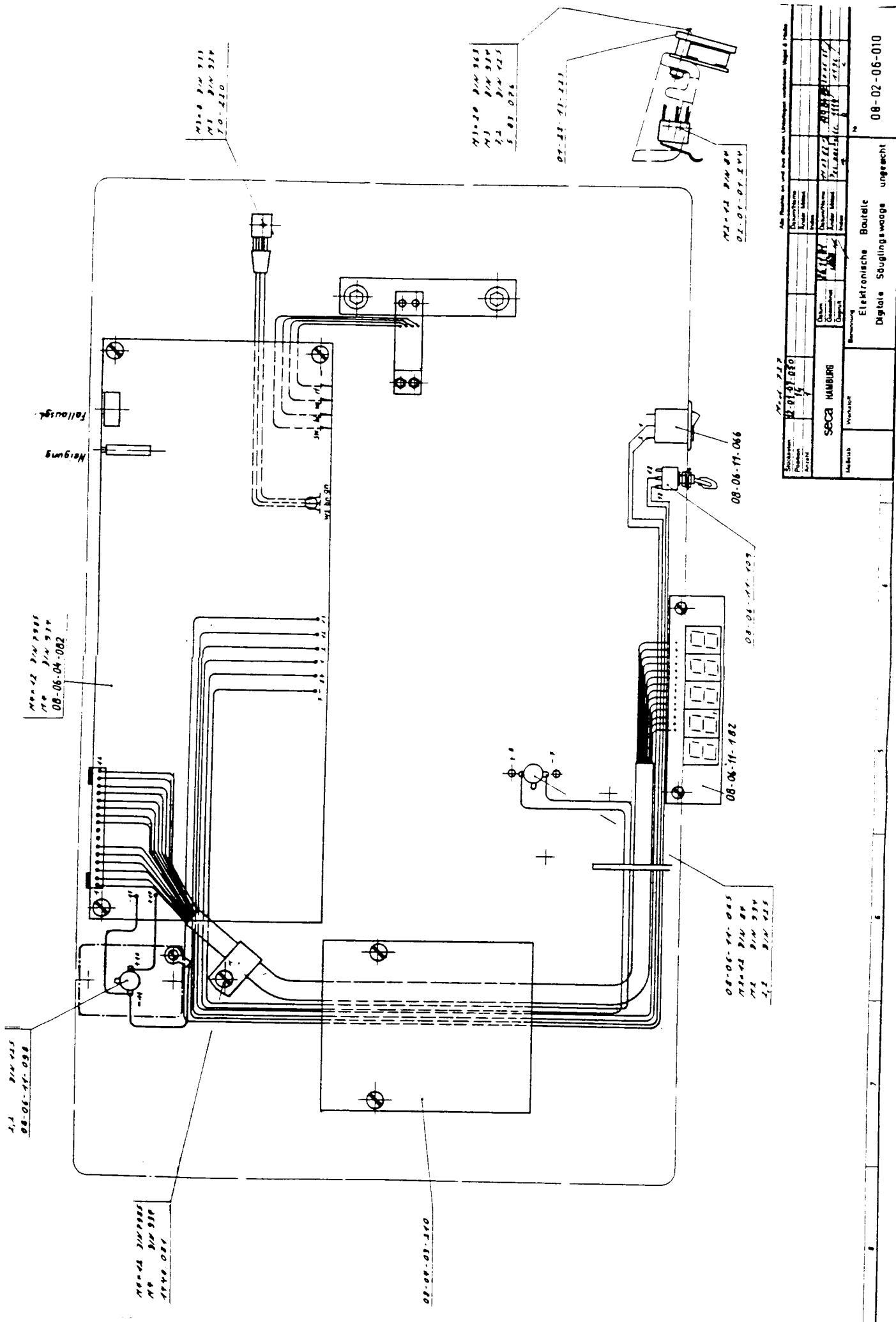
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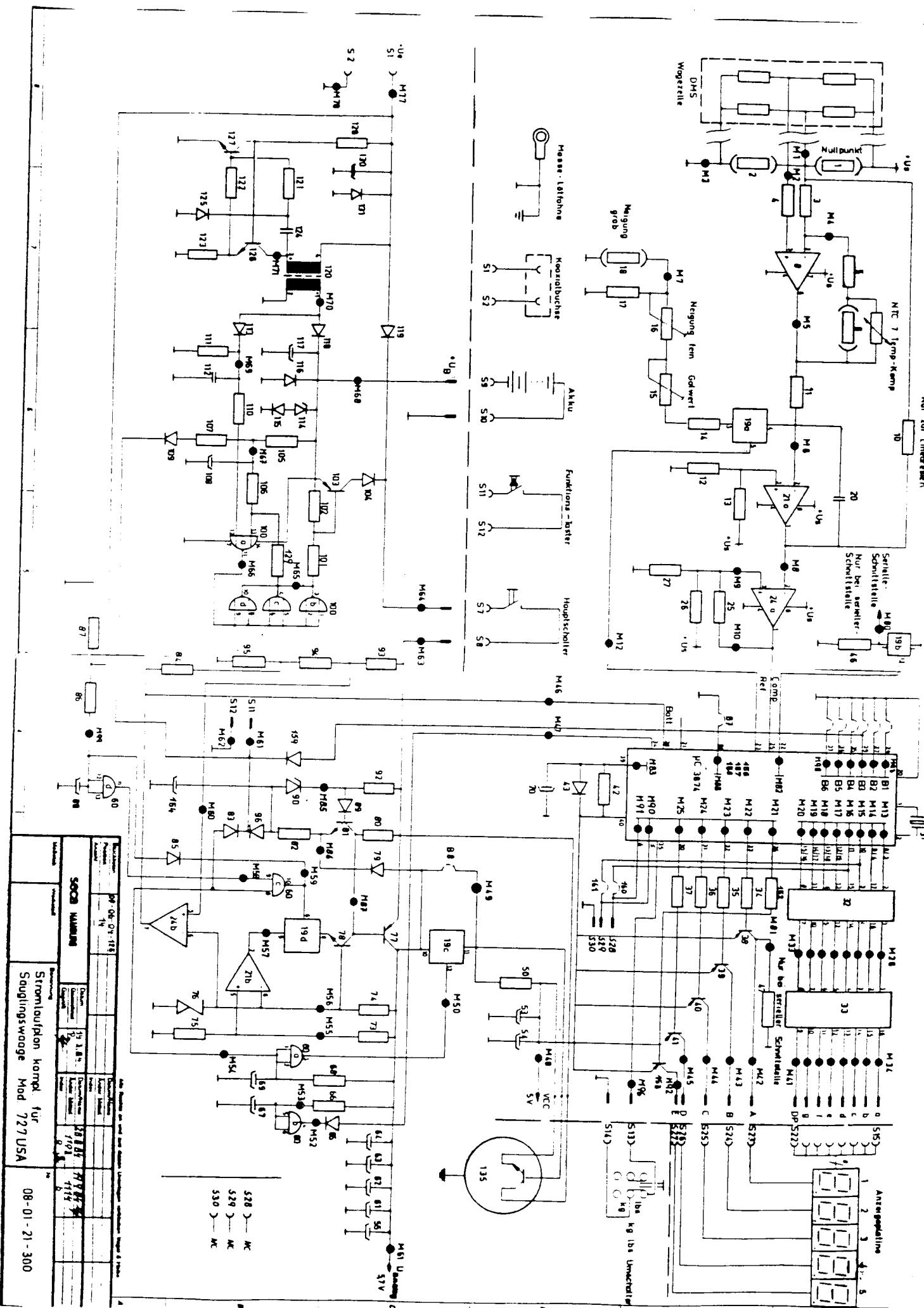


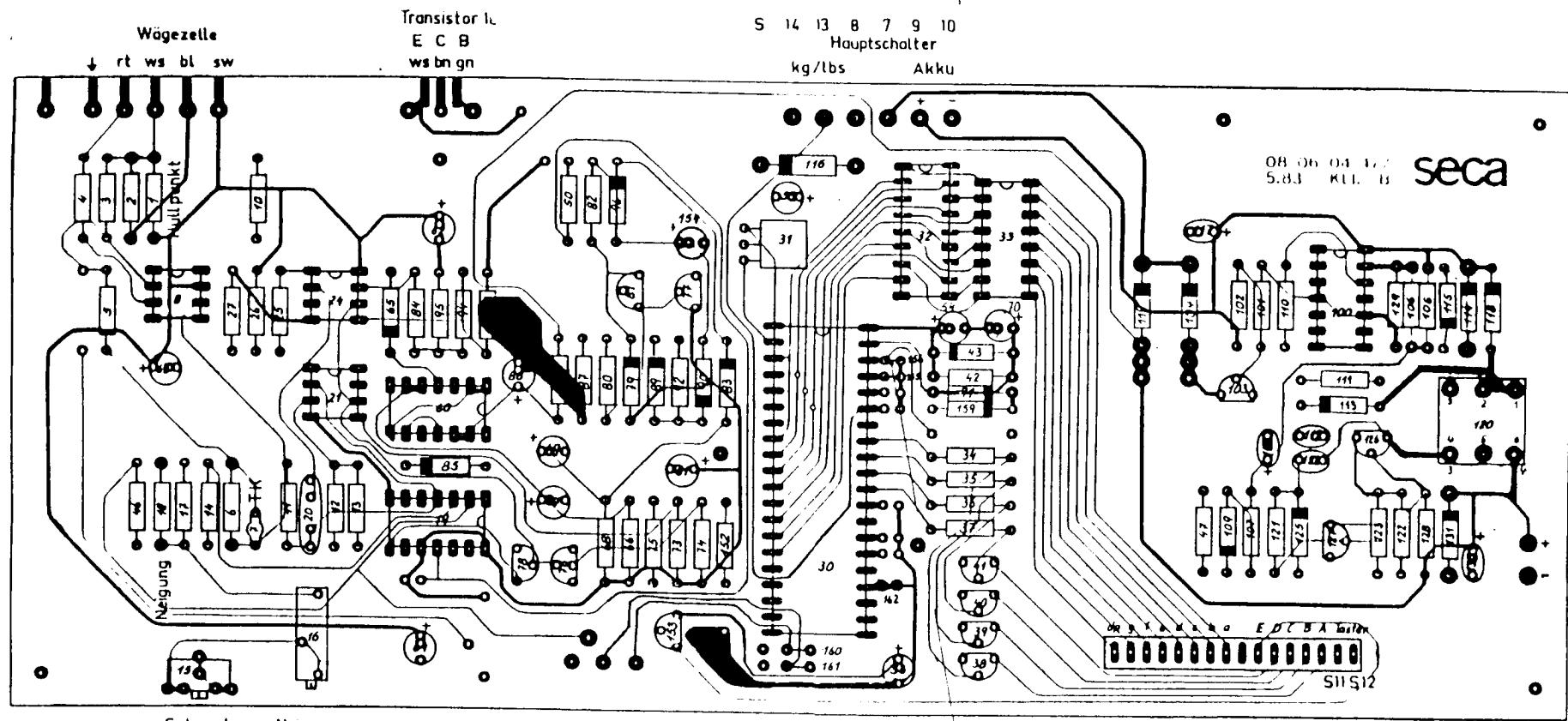
بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِيْمِ

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Stücklisten			Datum/Name		
Position			Änder. Mittel		
Anzahl			Index		
SOCO HAMBURG		Datum	01.11.80	Datum/Name	
		Gezeichnet		Änder. Mittel	
		Gepruft		Index	
Maßstab	Werkstoff	Benennung			Nr.
1:1		Sauglingswaage			
		Mod. 747			25-01-02-279







www.BestMortgageRates.com

Bestückungsmodifizierungen für verschiedene Modelle			
zu änderndes Bestückt.	Modell-Ausführungen		
	727	727 Intern. 10 kg/kb 10s	
Bestückt. bleibt bestehen	■		
Bestückt. herausströmen	■		
Blende 91	■		■
Kondensator 154	■		■
Brücke 158	■		■
Blende 159	■		■
Stromlaufpflan	00-01-21-290	00-01-21-300	

Pin 38
120 g-Fenster, Nullpunkt nachführung

Bohrplan 08-06-04-479
Stromlaufplan (08-01-21-298 / 15 kg)
08-01-21-300 / 20kg

Mod.	727			
Stückzahlen:	08-06-122	Datum/Name	25.5.11	12-11-11
Position:	727	Änder. Minuten:	1110	1114
Anzahl:		Index:	20	
		Datum:	10.5.11	
		Datum/Name:	10.5.11	21.10.11
		Änder. Minuten:	1101	1102
		Index:	100	100
Maßstab:	Werkstoff:	Beschreibung:		
2:1		Bestückungsplan Hauptplatine Sauglingswaage		
		Nr.		
		08-06-04-122		

And-Mittel Index	1024 a	1107 b N	1103 c ya	1162 d ya
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Teil Nr.	Stück	Benennung	zu Teil Nr.	Material			seca Zeichnungs-Nr.	AV			
				Fertigmaße, Halbzeug, Bestell-Nr.	DIN RM	Werkstoff Lieferant		Pt/Einh (DM)	Gew/St (kg)	Mat (DM)	Lohn (DM)
01	1	Metallfilmwiderstand		einmessen	471						
02	1	Metallfilmwiderstand		einmessen	471						
03	1	Metallfilmwiderstand		2,21 KO	471		62-10-25-221				
04	1	Metallfilmwiderstand		2,21 KO	471		62-10-25-221				
05	1	Metallfilmwiderstand		100 KO	471		62-10-27-100				
06	1	Metallfilmwiderstand		einmessen	471	Standardw. 4,75 KO	62-10-25-475				
07	1	NTC-Widerstand		6,8 KO/4100/25°C		Siemens	62-50-05-680				
08	1	IC		OP 07			61-80-00-070				
09											
10	1	Metallfilmwiderstand		1,8 MO	471	Nearlserungswid. (Richtw.)	62-10-28	182			
11	1	Metallfilmwiderstand		90,9 KO	471		62-10-26-909				
12	1	Metallfilmwiderstand		10 KO	471		62-10-26-100				
13	1	Metallfilmwiderstand		10 KO	471		62-10-26-100				
14	1	Metallfilmwiderstand		150 KO	471		62-10-27-150				
15	1	Trimmer		1 KO / stehend			62-83-10-510				
16	1	Trimmer		10 KO / 960-20			62-85-62-610				
17	1	Metallfilmwiderstand		90,9 KO	471		62-10-26-909				
18	1	Metallfilmwiderstand		einmessen	471						
19	1	IC		CD 4066 BF			61-52-40-661				
20	1	Kondensator		4,7 nF/100 V FKS 2			63-00-81-347				
21	1	IC		LM 358 N		National	61-80-03-580				
22											
23											
24	1	IC		LM 393 N			61-80-03-930				
25	1	Kohleschichtwiderstand		3,3 MO	CR 25		62-00-38-330				

Stückliste Nr.	Blatt Anzahl Nr.	Datum	Benennung	Modell	Übertrag von Blatt Nr.
08-06-04-122	7 1	24.06.1983	seca Hamburg Hauptplatine	727	

Datum, Name	17. 6.	20.1.84	28.8.84	14.12.84	15.4.95
And- Mittel	0,88	1040	1103	1136	1178
Index	a	b	c	d	e

Teil Nr	Stück	Benennung	zu Teil Nr	Material			Seca Zeichnungs-Nr	AV			
				Fertigfalte, Halbzeug, Bestell-Nr	DIN RM	Werkstoff Lieferant		Pr/Einh (DM)	Gew/St (kg)	Mat (DM)	Lohn (DM)
26	1	Metallfilmwiderstand		7,15 KO	471		62-10-25-715				
27	1	Metallfilmwiderstand		12,1 KO	471		62-10-26-121				
28											
29	1	Prüfetikett	30				14-05-01-506				
30	1	Mikroprozessor		3870/080615207		Telefunken	61-70-38-707				
31	1	Quarz		4 MHz HC-18/U			64-10-00-010				
32	1	IC		DS 8863 N		National	61-55-88-630				
33	1	DIL-Widerstandsnetzwerk		100 0 x 8 16pol.			62-40-24-100				
34	1	Kohleschichtwiderstand		1 KO	CR 25		62-00-25-100				
35	1	Kohleschichtwiderstand		1 KO	CR 25		62-00-25-100				
36	1	Kohleschichtwiderstand		1 KO	DR 25		62-00-25-100				
37	1	Kohleschichtwiderstand		1 KO	CR 25		62-00-25-100				
38	1	Transistor		BC 327-25			61-10-03-272				
39	1	Transistor		BC 327-25			61-10-03-272				
40	1	Transistor		BC 327-25			61-10-03-272				
41	1	Transistor		BC 327-25			61-10-03-272				
42	1	Kohleschichtwiderstand		10 KO	CR 25		62-00-26-100				
43	1	Diode		1 N 4148			61-00-41-480				
44											
45											
46	1	Kohleschichtwiderstand		3,3 KO	CR 25	Nur bei Verwendung der	62-00-25-330				
47	1	Kohleschichtwiderstand		1 KO	CR 25	seriellen Schnittstelle	62-00-25-100				
48											
49											
50	1	Kohleschichtwiderstand		10 KO	CR 25		62-00-26-100				
Stückliste Nr		Blatt	Anzahl	Nr	Datum	24.06.1983	Benennung	Haupt 'atine	Modell	727	Übertrag von
08-06-04-122		Bearb			Gepr				Blatt Nr		

seca Hamburg

Datum, Name	20.8	28.8.84	7.1.85
And-Mittel	1107	1103	1143
Index	a 10	b 1/2	c 1/2

Teil Nr.	Stück	Benennung	zu Teil Nr.	Material			seca Zeichnungs-Nr.	AV			
				Fertigmaße, Halbzeug, Bestell-Nr.	DIN RM	Werkstoff Lieferant		Pr/Einh (DM)	Gew/St. (kg)	Mat. (DM)	Lohn (DM)
51											
52											
53	1	Tantal-C		10 uF/10 V			63-70-10-710				
54	1	Tantal-C		10 uF/10 V			63-70-10-710				
55	1	Tantal-C		10 uF/10 V			63-70-10-710				
56											
57											
58											
59											
60	1	IC		CD 4011 BE			61-52-40-111				
61	1	Tantal-C		10 uF/10 V			63-70-10-710				
62	1	Tantal-C		10 uF/10 V			63-70-10-710				
63	1	Tantal-C		10 uF/10 V			63-70-10-710				
64	1	Tantal-C		10 uF/10 V			63-70-10-710				
65	1	Diode		1 N 5818			61-01-58-180				
66	1	Kohleschichtwiderstand		220 KO	CR 25		62-00-27-220				
67	1	Tantal-C		1 uF/35 V			63-70-40-610				
68	1	Kohleschichtwiderstand		3,9 M	CR 25		62-00-28-390				
69	1	Tantal-C		22 μ F /16V			63-70-20-722				
70	1	Tantal-C		10 uF/10 V			63-70-10-710				
71											
72											
73	1	Metallfilmwiderstand		10 KO	471		62-10-26-100				
74	1	Metallfilmwiderstand		3,01 KO	471		62-10-25-301				
75	1	Metallfilmwiderstand		7,5 KO	471		62-10-25-750				
Stückliste Nr.		Blatt		Datum	24.06.1983	Benennung	Modell	Übertrag von			
08-06-04-122		Anzahl	Nr.	Bearb.				Blatt Nr.			
		7	3	Gepr.	10						
		seca Hamburg				Hauptplatine	727				

Datum,Name	26.34	28.8.84	19.9.84
And-Mittel	1040	1103	1114
Index	a	b	c

Teil Nr.	Stück	Benennung	zu Teil Nr.	Material			seca Zeichnungs-Nr.	AV			
				Fertigmaße, Halbzeug, Bestell-Nr.	DIN RM	Werkstoff Lieferant		Pr/Einh (DM)	Gew/St (kg)	Mat (DM)	Lohn (DM)
76	1	Referenzelement		LM 336 Z			61-30-03-365				
77	1	Transistor		BC 307 B			61-10-03-072				
78	1	Transistor		BC 237 B			61-10-02-372				
79	1	Diode		1 N 4148			61-00-41-480				
80	1	Kohleschichtwiderstand		1 K0	CR 25		62-00-25-100				
81	1	Transistor		BC 237 B			61-10-02-372				
82	1	Kohleschichtwiderstand		2,2 K0	CR 25		62-00-25-100				
83	1	Diode		1 N 4148			61-00-41-480				
84	1	Kohleschichtwiderstand		2,2 M0	CR 25		62-00-28-220				
85	1	Diode		1 N 4148			61-00-41-480				
86	1	Kohleschichtwiderstand		100 K0	CR 25		62-00-27-100				
87	1	Kohleschichtwiderstand		100 K0	CR 25		62-00-27-100				
88	1	Tantal-C		1 uF/35 V			63-70-40-610				
89	1	Diode		1 N 4148			61-00-41-480				
90	1	Zenerdiode		BZX 83 3,3 V			61-03-00-330				
91											
92	1	Kohleschichtwiderstand		1 K0	CR 25		62-00-25-100				
93	1	Metallfilmwiderstand		750 K0	471		62-10-27-750				
94	1	Metallfilmwiderstand		365 K0	471		62-10-27-365				
95	1	Metallfilmwiderstand		100 K0	471		62-10-27-100				
96	1	Diode		1 N 4148			61-00-41-480				
97											
98											
99											
100	1	IC		CD 4001 BE			61-52-40-011				

Stückliste Nr.
08-06-04-122

Blatt
Anzahl
7
Nr.
4

seca Hamburg

Datum
24.06.1983
Bearb
Gepr
W

Benennung

Hauptplatine

Modell
727

Übertrag von
Blatt Nr.

Datum, Name	28.4	23.10.84	272.85	15485					
Änd.-Mittel	1103	1120	1162	1178					
Index	a	b	c	d					

Teil Nr	Stück	Benennung	zu Teil Nr.	Material			seca Zeichnungs-Nr.	AV				
				Fertigmaße, Halbzeug, Bestell-Nr	DIN RM	Werkstoff Lieferant		Pr./Einh (DM)	Gew/St (kg)	Mat (DM)	Lohn (DM)	Zeit (min)
101	1	Kohleschichtwiderstand		1 K0	CR 25		62-00-25-100					
102	1	Kohleschichtwiderstand		10 K0	CR 25		62-00-26-100					
103	1	Transistor		BC 327-25			61-10-03-272					
104	1	Schottky-Diode		1 N 5818			61-01-58-180					
105	1	Kohleschichtwiderstand		3,9 MΩ	CR 25		62-00-28-390					
106	1	Kohleschichtwiderstand		1 MΩ	CR 25		62-00-28-100					
107	1	Kohleschichtwiderstand		270 0	CR 25		62-00-24-270					
108	1	Tantal-C		22 uF/16 V			63-70-20-722					
109	1	Diode		1 N 4148			61-00-41-480					
110	1	Kohleschichtwiderstand		1 MΩ	CR 25		62-00-28-100					
111	1	Kohleschichtwiderstand		220 K0	CR 25		62-00-27-220					
112	1	Kondensator		10 nF	EDPU		63-20-70-410					
113	1	Diode		1 N 4148			61-00-41-480					
114	1	Z-Diode		ZPY 15		ITT	61-03-01-500					
115	1	Diode		1 N 4148			61-00-41-480					
116	1	Diode		HAB 005			61-02-00-050					
117	1	Tantal-C		10 uF/25 V			63-70-30-710					
118	1	Diode		1 N 4148			61-00-41-480					
119	1	Schottky-Diode		1 N 5818			61-01-58-180					
120	1	Übertrager					08-06-10-245					
121	1	Kohleschichtwiderstand		47 K0	CR 25		62-00-26-470					
122	1	Kohleschichtwiderstand		4,7 K0	CR 25		62-00-25-470					
123	1	Kohleschichtwiderstand		6,8	CR 25		62-00-22-680					
124	1	Kondensator		470 pF	EDPU							
125	1	Diode		1 N 4148			61-00-41-480					

Stückliste Nr

08-06-04-122

Blatt

Anzahl

Nr

5

seca Hamburg

Datum

24.06.1983

Bearb

Gepr

kp

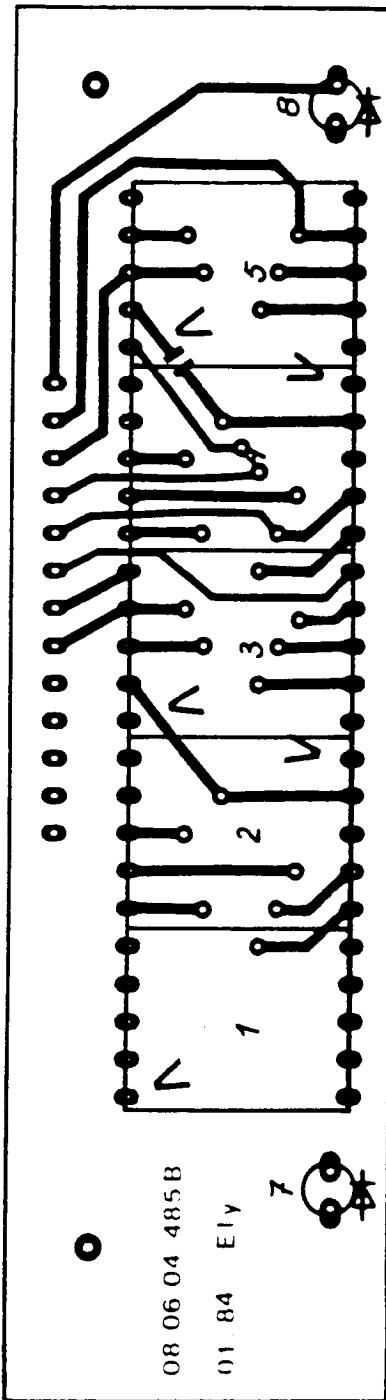
Benennung

Hauptplatine

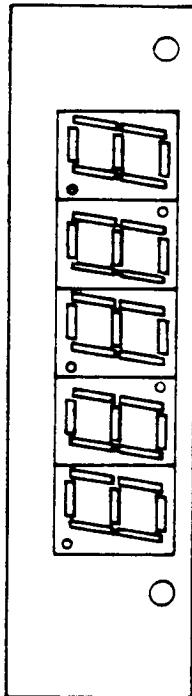
Modell

Übertrag von
Blatt Nr

Datum, Name	28. 4	10.9.89	20.05.1989										
And-Mittel	1103	1114	1196										
Index	a	b	c										
Teil Nr	Stück	Benennung	zu Teil Nr	Material			seca Zeichnungs-Nr	AV					
				Fertigmaße, Halbzeug, Bestell-Nr	DIN RM	Werkstoff Lieferant		Pr/Einh (DM)	Gew/St (kg)	Mat (DM)	Lohn (DM)	Zeit (min)	
126	1	Transistor		BC 337-B			61-10-03-372						
127	1	Transistor		BC 237-B			61-10-02-372						
128	1	Kohleschichtwiderstand		4,7 KO	CR 25		62-00-25-470						
129	1	Kohleschichtwiderstand		10 MΩ			62-00-39-100						
130	1	Tantal-C		10 uF/25 V			63-70-30-710						
131	1	Diode		1N 4002			61-00-40-020						
132													
133													
134													
135	1	Kabel mit Transistor					08-06-11-171						
136													
137													
138	1	Stiftleiste		16polig 6410		Molex	65-44-01-625						
139	8	Lötstifte, klein					66-30-20-010						
140	8	Steckstift					66-30-10-010						
141	1	Isolierband		19x20 mm/schwarz		Scotch	18-01-06-234						
142													
143													
144													
145	1	Leiterplatte		66-16-04-477			08-06-04-477						
146		Bohrplan					08-06-04-479						
147		Bestückungsplan					08-06-04-122						
148		Stromlaufplan					08-01-21-300						
149													
150													
Stückliste Nr		Blatt Anzahl	Nr										
08-06-04-122		7	6	seca Hamburg	Datum	24.06.1983	Benennung						
					Bearb								
					Gepr								
								Hauptplatine					
									Modell				
									727				
									Übertrag von				
									Blatt Nr				

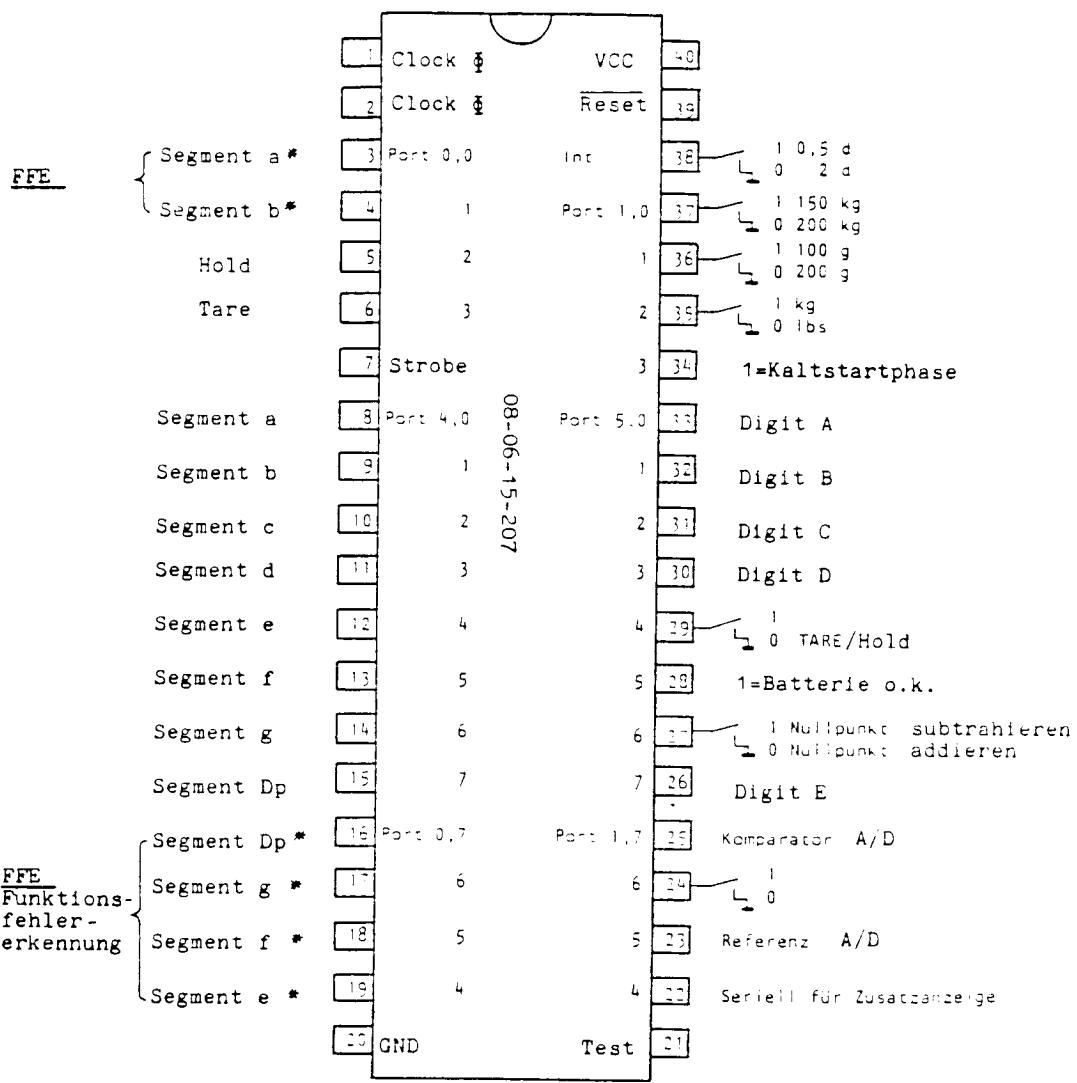


Maßstab 1:1
Lage für Dezimalpunkt beachten.



Stücklisten:	08-06-91-125			Datum/Name:		
Position:	01			Änder. Mittell.:		
Anzahl:	1			Index:		
seca	111111			Datum:	13.3.84	Datum/Name:
				Gezeichnet:	11	Änder. Mittell.:
				Gepröft:		Index:
Maßstab:	2 : 1 (1 : 1)	Werkstoff:	Benennung:			Nr.
			Bestückungsplan Anzeigeplatine Mod 727 USA		08-06-04-125	

Datum, Name															
And-Mittel															
Index															
Teil-Nr.	Stück	Benennung		zu Teil-Nr.	Material				seca Zeichnungs-Nr.		AV				
					Fertigmaße, Halbzeug, Bestell-Nr.		DIN RM		Werkstoff Lieferant		Pc/Einh (DM)	Gew/St. (kg)	Mat (DM)	Lohn (DM)	Zeit (min)
01	1	LED-Azeige			HA 1141 R				Siemens		61-95-11-410				
02	1	LED-Anzelge			HA 1141 R				Siemens		61-95-11-410				
03	1	LED-Anzelge			HA 1141 R				Siemens		61-95-11-410				
04	1	LED-Anzelge			HA 1141 R				Siemens		61-95-11-410				
05	1	LED-Anzelge			HA 1141 R				Siemens		61-95-11-410				
06															
07	1	Leuchtdiode 3 mm rot			CQV 10-3				Siemens		61-90-00-111				
08	1	Leuchtdiode 3 mm rot			CQV 10-3				Siemens		61-90-00-111				
09															
10															
11	1	Leiterplatte									08-06-04-485				
12		Bohrplan									08-06-04-486				
13		Bestückungsplan									08-06-04-125				
14		Stromlaufplan									08-01-21-300				
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
Stückliste Nr.		Blatt Anzahl 1		Nr. 1		sec a Hamburg		Datum 14.03.84	Benennung Anzeigeplatine 1' 1 / 20 kg		Modell 727	Übertrag von Blatt Nr.			
08-06-04-125		Anzahl 1		Nr. 1		sec a Hamburg		Bearb Gepr							



1 keine Brücke=Highpegel
0 Brücke=Lowpegel

Pin:38 37 36 35 Interne Auflösung
 1 0 0 0 4% Nullpunkt nachführung: 747 Export
 0 1 1 0 920 Export

Pin:29 24 707, 708, 727, 747, 770, 920
 1 1 727 Export
 1 0
 0 1
 0 0 } Neuentwicklungen

Mod.	707/708/770	727	767	920
Situations-	08-06-04-068	08-06-04-122	08-06-04-078	Alle Rechte an und aus diesem Unternehmen verbleiben Vogel & Hahn
Position	65	10	15,1	
Anzahl	—	—	—	0,1
sec a	HAMBURG	Datum (berechnet)	14.3.85	Datum/Name Rechnung
Maßstab	Werkstatt	Georef.	BU	Andere Mittel
./.	./.	Bemerkung:		Index
		Pinbelegung 3870 uc		
		mit Programm 3		
			Nr.	
			08-06-1	38